

1. Do you put any extra microorganisms in your soil; so that it's you can create a state closer to nature?

No, I don't.

2. For the fertilisers, do you make or buy them?

I buy.

3. Is the NPK content written?

4331- Yes, it's written.

4. How do you know how much is needed to be added?

Basically, based on experience. For example if last time I added too much, I would adjust accordingly.

5. Have you conducted soil tests before?

Yes. Some officials from Agriculture, Fisheries and Conservation Department collect soil sample for testing every year.

So what we are doing is creating a biosensor that depending on the NPK content, would give off different response. This would enable you to know what is nutrient is sufficient and what not. For the price, it is estimated be around US \$1-10 based on previous examples. But we are still in the process so still this information is not certain. The range of detection would be quite broad. The advantage of this sensor is it can give you the results faster.

6. You have mentioned that you give your soil samples to the agricultural organisation. How long does it usually take?

It takes usually like a month.

7. So this sensor would take few minutes. Do you measure your soil nutrient content through any other methods?

No. Just based on experience.

8. What are the factors that affect your decision on whether or not you would use this device?

The price.

9. How much would it be your budget be?

\$200

**10. Per measurement?**

How is it the device going to be? Is it non reusable?

**11. We are currently planning to have it on paper or if possible as a machine. Would you have any preference?**

Simpler, more convenient, fast, the better.

**12. Is solely the NPK content sufficient for you?**

Yes, I guess those are the basic nutrients.

**13. We use *E. coli* with synthesised genes, we haven't measured the adverse effect on soil, the possibility of using the nutrients, contaminate soil etc., if it does, would you care?**

If it takes up nutrients of my soil. Yes, I would care.

**14. Then would it be better if only part of the soil sample is taken to be test?**

Yes, it would better.

**15. Do you know of any policies concerning the use of biosensors?**

No.

**16. Would you have any suggestions concerning this matter?**

No, I can't think of them now.

**17. So in U.S., there are certain organisations that test the biosensors before they are used in field, do you think that this should be required in Hong Kong as well?**

Yes, just in case you could contaminate the soil.

**18. Do you think that this has potential to be used in the widely on organic farms?** Yes, if it is cheap and convenient.

**19. What are your opinions concerning the universities doing such research on biosensors for agricultural use?**

Well, I think that you should more consult and understand farms before doing the research.

**20. Lastly, how often do you add the fertilisers?**

Depends on the growth of the plants. Basically, it's based on experience, if I know that the soil there is not that enough, I add more. It's usually, once or twice, because fertilisers are quite expensive.